

# United States Patent [19]

Okabe

[11] Patent Number: 4,807,276  
 [45] Date of Patent: Feb. 21, 1989

[54] RE-TRANSMISSION METHOD AND APPARATUS IN COMMUNICATION SYSTEM USING PUBLIC COMMUNICATION LINES

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 [21] Appl. No.: 147,325  
 [22] Filed: Jan. 22, 1988

[30] Foreign Application Priority Data

Jan. 24, 1987 [JP] Japan ..... 62-14472

[51] Int. Cl. 4 ..... H04M 11/00; H04N 1/32  
 [52] U.S. Cl. ..... 379/93; 379/100;  
 178/1; 178/2 R  
 [58] Field of Search ..... 379/93, 100; 358/280,  
 358/305; 178/1, 2 R, 3, 4, 4.1 B

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[57] ABSTRACT

In a communication system having an automatic transmission/reception function to perform data communica-

cations through telephone lines associated with teletex systems, facsimile systems and the like, re-transmission operations are performed when an addressee called for communications is busy (calling) or when communications is interrupted after an addressee has responded. In the re-transmission operation, a response from an addressee is detected and decided as to whether the response is automatically originated from a communication unit or originated by a person. When the latter response is detected, a wrong telephoning is decided and restrictions are placed on the re-transmission operation to thereby minimize trouble given to the addressee. On the condition that a wrong telephoning and a communication failure transmission operation are decided, the addressor station sequentially reduces the calling time or response waiting time in the communication system for each of re-transmission operations following the communication failure transmission operation, and on the condition that a response is received but no negotiation is settled within a predetermined period of time whereby a wrong telephoning and a communication failure transmission operation are decided, the addressor station inhibits communication operations following the communication failure transmission operation when time runs within a midnight discount time zone and permits the communication operations, inclusive of the initial transmission operation, to be performed twice when time runs outside the midnight discount time zone.

13 Claims, 7 Drawing Sheets

